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|--|-------------|----------------------|---------------------------------|-----------------------------|
| 10/731,248   | 12/10/2003  | Ryoko Amano          | 246404US6                       | 5688                        |
| 22850  | 7590        | 07/15/2009           |                                 |                             |
| OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.<br>1940 DUKE STREET<br>ALEXANDRIA, VA 22314 |             |                      | EXAMINER<br>HESS, DANIEL A      |                             |
|  |             |                      | ART UNIT<br>2876                | PAPER NUMBER                |
|  |             |                      | NOTIFICATION DATE<br>07/15/2009 | DELIVERY MODE<br>ELECTRONIC |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/731,248

**Applicant(s)**

AMANO ET AL.

**Examiner**

DANIEL A. HESS

**Art Unit**

2876

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 and 29-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 29, 30 and 32 is/are rejected.
- 7) ☒ Claim(s) 31 and 33-35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This action is responsive to applicant's filing of 4/17/2009, which has been entered into the electronic file of record.

#### ***Claim Rejections - 35 USC § 112***

Claim 32 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase 'supplying an encryption/decryption key corresponding to a type of said IC card of an object of said application' is not clear. An encryption/decryption key would not correspond to a type of IC card; it is just a key. The words 'of an object' are unclear.

If the applicant is referring to programming constructs, these are not tangible for patentability purpose (mere data constructs are not patentable).

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 7, 14 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohki et al. (US 5,952,639).

Re claim 1: Ohki teaches (see entire document; abstract provides good support for the examiner's statements) an ATM which interfaces with (reads from and writes to) an IC card that acts as a repository of electronic money. Display of the amount is a natural part of interfacing with the electronic money, thus the ATM will display information that is read from the IC card (electronic cash card).

The ATM is an information processing apparatus which reads an IC card. There is a reader on the ATM (see figure 4). Storage of read data, at least on a temporary basis in the ATM, is inherently necessary for the ATM to work with the read data (i.e. the electronic cash balance on the IC card).

See figure 2 and accompanying description. Display panel 142 displays transaction information. Certainly information such as the balance on the card will formatted for display on 142.

The display 142 will have driver software, which is simply the software control means for controlling the display.

As for the recently added limitations:

The examiner contends that all of the new limitations are met by the arrangement already cited, of an ATM interfaces with an IC card. As for 'executable applications', this is just another word for software, which an ATM employs for every single function it performs. An ATM

which interfaces with a smart card necessarily uses software to access the IC card and this software is stored on the card. Further, that software which interfaces with the IC card would only execute when the IC card is detected. Note that this does not mean that no software runs on the ATM except when the IC card is detected. But certainly those modules or sections of the software which interface with the IC card cannot operate unless the IC card is in contact. Interfacing with the IC card only makes sense when the IC card is detected. A 'polling mode' is simply a card sensing mode. There is an insertion slot in the ATM of Ohki et al. and clearly the ATM must have a way of knowing if a card has been inserted, as all ATMs do.

As for verification, this is seen in part through unlocking of locked IC card (such as be password verification).

See column 7, lines 45+ of Ohki: "As will be described below, in the case of the present embodiment, the automatic teller machine 14 can also unlock a locked IC card. In a locked IC card, a flag indicating the locked state is stored in the EEPROM unit 105."

Thus, there must necessarily be two stages, paralleling the amended claims, namely a first stage of detecting and unlocking, which correspond to the polling and verification portions of the claims, and a second stage of the actual financial transaction activities, including information acquisition and displaying and processing, which happen in conjunction with successful completion of the first part.

Regarding storing information acquired while in polling mode, it is plain that this can be the card/account ID, which must be read initially at card insertion. This account ID must naturally be held in memory because it will be needed for the duration of the transaction.

Re claims 2 and 3:

The subject matter in these claims is similar to the subject matter of claim 1.

Re claim 4: The claim simply can mean that the reader determines if a card is a proper type for a reader. This is a given. If someone tries to put a non-cash card into Ohki's cash-card reader, it would necessarily give some kind of error.

Re claim 7: Ohki et al. would necessarily display balance information since this is the most fundamental information on the electronic cash IC card which interfaces with the ATM in his teachings.

Re claim 14: See discussion re claim 1, above.

Re claim 29: Balance checking is in the very title of Ohki et al.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 5, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohki in view of Goldthwaite (US 20040127256).

Re claim 5:

Lacking in Ohki is a teaching of contactless communication between a terminal and IC card.

Goldthwaite discusses (see paragraph [0003]) a whole range of art in the domain of contactless smart (ic) cards that interface with terminals.

In view of Goldthwaite's teaching, it would have been obvious to make the communication in Ohki contactless in order to allow more rapid interaction with the terminal.

Re claim 6: It is especially the case in wireless smart card communication systems as in Goldthwaite, that detection methods and processes are needed to make communication between the wireless card and the terminal.

Claims 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohki et al. as applied to claim 1 above, in view of Rikuna (US 4827113).

Re claim 8: Ohki fails to teach encryption between the card and the reader.

Rikuna teaches (abstract is exemplary) an arrangement of an IC card communicating with a terminal where there is encryption and decryption of communication using public and private keys.

In view of Rikuna's teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known key-based encryption for communications between an IC card and a terminal to help resist fraud.

Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohki et al. in view of Bornemisza-Wahr (US 6073119).

Re claims 9-12:

It is true of many ATMs that interactions with the ATM are time-limited. In other words, if the user takes no action, the ATM will time-out for security reasons.

In Bornemisza-Wahr (column 14, lines 34+):

"As discussed above, the session timer determines the maximum amount of time a user can spend in a single session. When the session timer is active, the user sees a timer on the user's screen, which displays the time remaining in the session."

The motivation to have a time-out feature is so that if one customer forgets to exist the ATM program, the next person will not be able to access their account. The motivation to show



time remaining is to remind a user of the timeout feature so that they may perform their transaction in a timely manner.

Re claims 13: Use of sounds in interactive terminals is common, both to enhance the user's experience and to aid the blind.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohki et al.

While Ohki et al. is not explicit about initialization, initialization is a normal part of most applications. This is something the examiner, having studied computer science, can attest to. A motivation for an initialization part of software is to separate those parts of the software which run once from those parts of the software which run repeatedly as part of the a steady-state system.

### ***Response to Arguments***

Applicant's arguments filed 4/17/2009 have been fully considered but they are not persuasive.

The discussion below focuses on the amended independent claims.

The examiner contends that all of the new limitations are met by the arrangement already cited, of an ATM interfaces with an IC card. As for 'executable applications', this is just another word for software, which an ATM employs for every single function it performs. An ATM which interfaces with a smart card necessarily uses software to access the IC card and this software is stored on the card. Further, that software which interfaces with the IC card would only execute when the IC card is detected. Note that this does not mean that no software runs on

the ATM except when the IC card is detected. But certainly those modules or sections of the software which interface with the IC card cannot operate unless the IC card is in contact. Interfacing with the IC card only makes sense when the IC card is detected. A 'polling mode' is simply a card sensing mode. There is an insertion slot in the ATM of Ohki et al. and clearly the ATM must have a way of knowing if a card has been inserted, as all ATMs do.

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Thus, there must necessarily be two stages, paralleling the amended claims, namely a first stage of detecting and unlocking, which correspond to the polling and verification portions of the claims, and a second stage of the actual financial transaction activities, including information acquisition and displaying and processing, which happen in conjunction with successful completion of the first part.

Regarding storing information acquired while in polling mode, it is plain that this can be the card/account ID, which must be read initially at card insertion. This account ID must naturally be held in memory because it will be needed for the duration of the transaction.

***Allowable Subject Matter***

Claims 31 and 33-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach or fairly suggest, in the context of all of the limitations of claim 1, an arrangement wherein there is display of an initial screen *prompting the user to position the IC card in a proximity of the information processing apparatus so as not to cover the logo on the IC card*, and outputting the claimed detection and compatibility signals.

While prompts for cards are known in the art, this specific type of prompting is neither shown nor suggested.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL A. HESS whose telephone number is (571)272-2392. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel A Hess/  
Primary Examiner, Art Unit 2876